

CLAIMS

All claims have been presented whether or not an amendment has been made. The claims have been amended as follows:

1. **(Canceled)**
2. **(Currently Amended)** The system of claim 27 ~~claim 1~~, wherein the diagnostic tool uses the first and the second thread control messages ~~copies~~ to generate diagnostic messages.
3. **(Original)** The system of claim 2, wherein the diagnostic messages show the threads' execution order.
4. **(Original)** The system of claim 2, wherein the diagnostic messages show all messages generated by the threads.
5. **(Canceled)**
6. **(Original)** The system of claim 2, wherein the diagnostic messages trigger new events to be performed.
7. **(Currently Amended)** The system of claim 2, wherein the diagnostic tool is operable to identify a source of each of the first and the second thread control messages ~~identifies the threads' source~~.
8. **(Currently Amended)** The system of claim 2, wherein the diagnostic tool is operable to truncate any message that exceeds a predetermined size ~~truncates threads exceeding a predetermined size~~.

9. **(Currently Amended)** A method, comprising:
- intercepting a thread control message being communicated ~~threads-passed~~ from a first PTE to a second PTE, the second PTE comprising a thread and operable to initiate an execution of the thread in response to receiving the thread control message ~~each thread comprising a plurality of executable program fragments~~;
 - copying the intercepted thread control message ~~threads~~;
 - transmitting a copy of the intercepted thread control message to a diagnostic tool of a third PTE;
 - generating a diagnostic message by the diagnostic tool based at least in part on the copy of the intercepted thread control message ~~a PTE Tool~~; and
 - displaying the diagnostic message, wherein the diagnostic message indicates the thread's execution order ~~shows the threads' execution order~~.
10. **(Currently Amended)** The method as in claim 9, wherein the diagnostic message shows all messages generated by the thread ~~threads~~.
11. **(Canceled)**
12. **(Original)** The method as in claim 9, wherein the diagnostic message triggers new events to be performed.
13. **(Currently Amended)** The method as in claim 9, wherein the diagnostic tool is operable to identify a source of the thread control message ~~identifies the threads' sources~~.
14. **(Currently Amended)** The method as in claim 9, wherein the diagnostic tool is operable to truncate any message that exceeds a predetermined size ~~truncates the threads exceeding a predetermined size~~.

15. **(Currently Amended)** A system, comprising:
- means for intercepting a thread control message ~~threads~~ passed from a first PTE to a second PTE, the second PTE comprising a thread and operable to initiate an execution of the thread in response to receiving the thread control message ~~each thread comprising a plurality of executable program fragments;~~
- means for copying the intercepted thread control message ~~threads~~;
- means for transmitting a copy of the intercepted thread control message to a diagnostic tool of a third PTE;
- means for generating a diagnostic message by the diagnostic tool based at least in part on the copy of the intercepted thread control message ~~a PTE Tool~~; and
- means for displaying the diagnostic message, wherein the diagnostic message indicates the thread's execution order ~~shows the threads' execution order.~~
16. **(Currently Amended)** The system of claim 15, wherein the diagnostic message shows all messages generated by the thread ~~threads~~.
17. **(Canceled)**
18. **(Original)** The system of claim 15, wherein the diagnostic message triggers new events to be performed.
19. **(Currently Amended)** The system of claim 15, wherein the diagnostic tool is operable to identify a source of the thread control message ~~identifies the threads' sources.~~
20. **(Currently Amended)** The system of claim 15, wherein the diagnostic tool is operable to truncate any message that exceeds a predetermined size ~~truncates the threads exceeding a predetermined size.~~

21. **(Currently Amended)** An apparatus, comprising:

~~A computer-readable~~ a computer-readable medium having stored thereon a plurality of instructions, said plurality of instructions when executed by a computer, cause said computer to perform:

intercepting a thread control message ~~threads~~ passed from a first PTE to a second PTE, the second PTE comprising a thread and operable to initiate an execution of the thread in response to receiving the thread control message ~~each thread comprising a plurality of executable program fragments;~~

copying the intercepted thread control message ~~the threads;~~

transmitting a copy of the intercepted thread control message to a diagnostic tool of a third PTE;

generating a diagnostic message by the diagnostic tool based at least in part on the copy of the intercepted thread control message ~~a PTE Tool;~~ and

displaying the diagnostic message, wherein the diagnostic message indicates the thread's execution order ~~shows the threads' execution order.~~

22. **(Currently Amended)** The apparatus ~~computer-readable medium~~ of claim 21, wherein the diagnostic message shows all messages generated by the thread ~~threads.~~

23. **(Canceled)**

24. **(Currently Amended)** The apparatus ~~computer-readable medium~~ of claim 21, wherein the diagnostic message triggers new events to be performed.

25. **(Currently Amended)** The apparatus ~~computer-readable medium~~ of claim 21, wherein the diagnostic tool is operable to identify a source of the thread control message ~~identifies the threads' sources.~~

26. **(Currently Amended)** The apparatus ~~computer-readable medium~~ of claim 21, wherein the diagnostic tool is operable to truncate any message that exceeds a predetermined size ~~truncates the threads exceeding a predetermined size.~~

27. (New) A system, comprising:

a first portable thread environment (PTE) comprising a first thread, the first PTE operable to execute the first thread and to communicate a thread control message; and

a router operable to receive the thread control message from the first PTE and to route the received thread control message to both a second PTE comprising a second thread and a third PTE comprising a diagnostic tool, the second PTE operable to initiate execution of the second thread in response to receiving the thread control message.

28. (New) The system of Claim 27, wherein the first PTE is operable to communicate a thread control message after executing the first thread.

29. (New) The system of Claim 27, wherein the thread control message comprises a destination address identifying the second thread.